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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,378	09/26/2003	Beat Kilcher	HAWE-55-107	8540
26875	7590	09/09/2004	EXAMINER	
WOOD, HERRON & EVANS, LLP			YUN, JURIE	
2700 CAREW TOWER			ART UNIT	
441 VINE STREET			PAPER NUMBER	
CINCINNATI, OH 45202			2882	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/672,378	<b>Applicant(s)</b> KILCHER ET AL.	
	<b>Examiner</b> Jurie Yun	<b>Art Unit</b> 2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                              |                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1/29/04</u> . | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 6 is objected to because of the following informalities: there is lack of antecedent basis for "the sensor clamp" in line 6. It is assumed this should be "a sensor clamp" and has been treated as such. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 112, second paragraph, because "at least one displaceable arm" is positively recited, but not "two arms".

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (USPN 6,203,195 B1) and further in view of Nakamura et al. (USPN 6,276,827 B1).
6. With respect to claim 1, Willis discloses a holder set for digital sensors for dentistry, each holder of said set comprising at least one displaceable arm (Fig. 3, 52), wherein for each kind of radiograph such as periapical radiographs and radiographs of lateral and anterior teeth, on one hand, and bitewing radiographs, on the other hand, a respective holder is used for all sensor formats (column 1, lines 20-27). Willis does not

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disclose the sensors being self-centered in the holder. Nakamura et al. disclose self-centering of a sensor (Fig. 1(a), 9) by two arms (8) independently of their format (column 2, lines 54-67). Although Nakamura et al. disclose self-centering of a cassette, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use this teaching of self-centering in the Willis apparatus to self-center the digital sensor, to ensure proper positioning.

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (USPN 6,203,195 B1) in view of Nakamura et al. (USPN 6,276,827 B1) as applied to claim 1 above, and further in view of Hellmick et al. (USPN 5,317,619).

8. With respect to claims 2 and 3, Willis/Nakamura et al. do not disclose the self-centering movement of the arms of the holder is provided by two angled levers arranged thereon, the levers being actuated by a pivotable camshaft, wherein the camshaft is operatively connected to a locking lever. Hellmick et al. disclose the self-centering movement of the arms of the holder (Figs. 7 & 8, 88) is provided by two angled levers (158) arranged thereon, the levers being actuated by a pivotable camshaft (128), wherein the camshaft is operatively connected to a locking lever (column 10, line 64 – column 11, line 15). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use two angled levers being actuated by a pivotable camshaft, wherein the camshaft is operatively connected to a locking lever, as taught by Hellmick et al., in the Willis/Nakamura et al. apparatus, to ensure the positioning is self-centering and the positioning movement is smooth.

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9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (USPN 6,203,195 B1) in view of Nakamura et al. (USPN 6,276,827 B1) as applied to claim 1 above, and further in view of Lackey et al. (USPN 3,771,781).

10. With respect to claims 4 and 5, Willis/Nakamura et al. do not disclose the self-centering movement of the arms of the holder is provided by a curved portion arranged on each arm and including a toothed rack, said toothed racks meshing with each other, wherein it comprises a catch actuated by a spring and acting upon one of the toothed racks. Lackey et al. disclose the self-centering movement of the arms of the holder is provided by a curved portion arranged on each arm and including a toothed rack (Fig. 2, 24-27), said toothed racks meshing with each other, wherein it comprises a catch actuated by a spring (Fig. 3, 75) and acting upon one of the toothed racks. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the self-centering movement of the arms of the holder be provided by a curved portion arranged on each arm and including a toothed rack, said toothed racks meshing with each other, wherein it comprises a catch actuated by a spring and acting upon one of the toothed racks, as taught by Lackey et al., in the Willis/Nakamura et al. apparatus, to ensure the positioning is self-centering and the positioning movement is smooth.

11. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willis (USPN 6,203,195 B1) as applied to claim 6 below.

12. With respect to claims 7 and 8, Willis discloses the clamping jaw comprises a plane (Fig. 3, 52) collaborating with a plane (22) of a locking portion in such a manner that the clamping jaw is lifted by displacing the locking portion in one direction, wherein

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the planes are provided with teeth (53). Willis does not disclose the planes are inclined. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the planes inclined, to facilitate holding the sensor in place.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Willis (USPN 6,203,195 B1).

15. With respect to claim 6, Willis discloses a holder set for digital sensors for dentistry, each holder of said set comprising at least one displaceable arm (Fig. 3, 52), wherein for each kind of radiograph such as periapical radiographs and radiographs of lateral and of anterior teeth, a respective holder is used for all sensor formats, a sensor clamp comprising a clamping jaw for pressing the sensor against grippers (Fig. 4, 36 & 56) independently of its format (column 1, lines 20-27).


***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 Jurie Yun  
September 2, 2004



Craig E. Church  
Primary Examiner